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10/561,936

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EXAMINER

GODENSCHWAGER, PETER F

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,936	Applicant(s) GREEN ET AL.	
	Examiner PETER F. GODENSCHWAGER	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/12/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's reply filed January 11, 2010 has been fully considered. Claims 1, 4-6, 8, and 13 are amended, and claims 1 and 3-17 are pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1, 3-4, 7-9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Patel et al. (US Pat. No. 6,051,252).

Regarding Claims 1 and 3: Patel et al. teaches a liquid coating composition comprising a polymeric component (film-forming polymer) (3:30-45) and an ethylenically unsaturated monomer (3:30-45, 4:64-5:5) that dries in the presence of a free radical source (curable to solid state by free radical polymerization) (6:58-65, 10:5-20). The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient). Patel et al. further teaches that the polymeric component is polyethyl methacrylate (a solid thermoplastic resin and methacrylic homopolymer resin) (4:25-45 and 11:10-25).

Regarding Claim 4: Patel et al. further teaches that the polymeric component is a methacrylate copolymer (4:25-40).

Regarding Claims 7 and 8: Patel et al. further teaches that the monomeric component is 2-ethyl hexyl methacrylate (5:14-30).

Regarding Claim 9: Patel et al. teaches that the resin system (polymers and monomeric component) comprise 20-25% by weight of the composition (5% primary polymer, 12% secondary polymer, 8% monomer) (3:30-45).

Regarding Claim 11: Patel et al. teaches that the monomeric component comprises 32% by weight of the resin system (5% primary polymer, 12% secondary polymer, 8% monomer) (3:30-45).

Claims 1, 7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Leo et al. (US Pat. No. 4,734,333).

Regarding Claim 1: Leo et al. teaches a liquid composition (solution) comprising a solid, thermoplastic, polymeric component (polycarbonate diol) and a monomeric component (2-hydroxyethyl acrylate, isobornyl acrylate) (1:50-2:15, 5:5-20) that is curable to a solid state by ultraviolet light (radical polymerization) (5:50-65). The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient).

Regarding Claim 7: Leo et al. teaches the monomeric component is an acrylate (2-hydroxyethyl acrylate, isobornyl acrylate) (5:5-20).

Regarding Claim 10: Leo et al. teaches the polymeric component in 10-40% of the resin (2:5-15).

Regarding Claim 11: Leo et al. teaches the monomeric component in 25-50% (1:50-2:15).

Claims 1, 3-5, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tobias (US Pat. No. 4,413,037).

Regarding Claims 1 and 3-5: Tobias teaches a liquid composition (solution) comprising a polymeric component and a monomeric component that is curable by free radical polymerization (2:4-10). As the final state of the composition after free radical polymerization is highly solvent and temperature dependent, the composition is deemed capable of being cured into a solid state. The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient). Tobias teaches the polymeric component is a copolymer (reaction product) of styrene and hydroxyethyl (meth)acrylate (2-hydroxy ethyl (meth)acrylate) (solid thermoplastic resin) (1:30-40).

Regarding Claims 7 and 8: Tobias teaches that the monomeric component is methyl acrylate (1:50-65).

Claims 1, 6-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakuma et al. (US Pat. No. 3,336,417).

Sakuma et al. teaches a free-radical polymerizable latex emulsion (liquid) comprising butadiene-styrene copolymer (solid, thermoplastic) in 14% by weight and methyl methacrylate monomer curable to a solid state (2:15-40, Example 1).

Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Patel et al. (US Pat. No. 6,051,242).

Regarding Claim 13: Patel teaches a method of drying to a solid (curing) a composition comprising a polymeric component (film-forming polymer) (3:30-45) and an ethylenically unsaturated monomer (3:30-45, 4:64-5:5) comprising the step of adding to the composition a free radical source (initiator) (6:58-65, 7:15-25, 10:5-20). The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient). Patel et al. further teaches that the polymeric component is polyethyl methacrylate (a solid thermoplastic resin and methacrylic homopolymer resin) (4:25-45 and 11:10-25).

Regarding Claims 14 and 15: Patel et al. teaches that the free radical source (initiator) is an organic peroxide such as a ketone peroxide (methyl ethyl ketone peroxides (6:58-67)).

Regarding Claim 16: Patel et al. teaches that the composition is dried (cured) in 60-80 seconds at a temperature of 15-25 °C (6:58-67 and 10:5-15).

Regarding Claim 17: The Examiner recognizes that all of the claimed physical properties are not positively taught by the reference, namely that less than 5% by weight of volatile components is lost by evaporation during the conversion of the composition to a solid state. However, the reference teaches all of the claimed ingredients, process steps, and process conditions. Therefore, the claimed properties would inherently be achieved by the method as claimed and disclosed. If it is the applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients, process steps, and process conditions.

Claim Rejections - 35 USC § 103

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leo et al. (US Pat. No. 4,734,333) in view of Levine (US Pat. No. 5,356,568).

Leo et al. teaches the composition of claim 1 as set forth above.

Leo et al. does not teach the composition further comprising an acid source and a carbon source. However, Levine teaches adding to coating compositions a blowing agent (gas source), a carbonific (carbon source), and ammonium polyphosphate (an acid source) (1:5-15, 2:10-30, 4:48-55). Leo et al. and Levine are analogous art because they

are concerned with the same flexible polymeric paints/coatings. At the time of the invention, a person of ordinary skill in the art would have been motivated to use the intumescent ingredients of Levine in the composition of Leo et al. and would have been motivated to do so because Levine teaches that they provide a high degree of flame-retardance and heat-resistance (2:1-10).

Double Patenting

Claims 1, 3-8 and 12-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 11/722,347. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim the same liquid intumescent coating composition comprising the same polymeric components and the same monomeric components and the same method of curing the composition. While 11/722,347 further comprises a silicate, the composition of the claims still fully encompasses the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3-9 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-20 of copending Application No. 11/722,348. Although the conflicting claims are not identical, they are

not patentably distinct from each other because both applications claim the same liquid intumescent coating composition comprising the same polymeric components and the same monomeric components. While 11/722,348 further comprises a reinforcement structure, the composition of the claims still fully encompasses the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments filed January 11, 2010 have been fully considered but they are not persuasive.

Applicant argues that the applied references (Patel et al., Leo et al., and Tobias) do not explicitly recite that they are intumescent compositions. However, as set forth above and in the Office Action mailed September 11, 2009, Patel et al., Leo et al., and Tobias each disclose all of the claimed ingredients, process steps, and/or process conditions of the composition. Therefore, the claimed physical properties (the intumescence) would inherently be achieved by the composition as claimed and disclosed. If it is the applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., other ingredients with which to react with the gas source resin) are not recited in the rejected claims 1, 3-11, and 13-17. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As set forth above, Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient). Furthermore, the instant claims 1, 3-11, and 13-17 only require the presence of at least one intumescent ingredient, therefore, the instant claims would support the position that a single ingredient may be labeled "intumescent" even without the presence of, for example, a carbon source or an acid source.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER F. GODENSCHWAGER whose telephone number is (571)270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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